Salol cooling curve data

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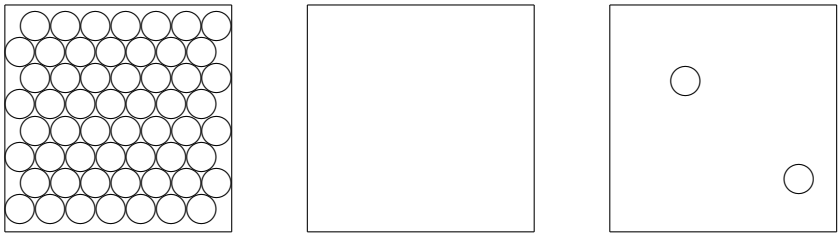
Changes of State



Solidification of salol (phenyl salicylate)

t/min	T/°C	t/min	T/°C
0.0	45	8.0	37
0.5	43	9.0	36
1.0	41	10.0	37
1.5	39	11.0	37
2.0	38	12.0	37
2.5	38	13.0	37
3.0	36	14.0	36
3.5	35	15.0	35
4.0	34	15.5	35
4.5	35	16.0	34
5.0	36	16.5	34
5.5	36	17.0	34
6.0	37	17.5	33
6.5	37	18.0	33
7.0	37	18.5	32

You could then think about the following points...

- Why did the temperature stay the same for so long? Was heat being lost to the surroundings during this time? If so, where did this heat energy come from?
- What was the freezing temperature of the salol (from your graph)? When did you see solidification start and finish?
- Sometimes it is found that the salol cools for a time, and then warms back up to settle at the same temperature for ages... Where did the heat come from to warm back up (it can't have come from the lab, which was cooler)? Why did this happen?